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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MARK RUTLEDGE

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Appeal 2008-4193  
Application 10/789,534  
Technology Center 2600

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Decided: October 28, 2008

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Before KENNETH W. HAIRSTON, JOHN A. JEFFERY, and KARL D.  
EASTHOM, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1, 3, 8, 10, 14, 16, 21, 23, and 27-38. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

## STATEMENT OF THE CASE

Appellant invented a mobile alarm system comprising a central alarm controller and a separate indicator component fixably located within a passenger vehicle. The component communicates wirelessly with the controller and performs an alarm indication function based on signals received from the controller.<sup>1</sup> Claim 8 is illustrative:

8. An alarm system fixably located within a passenger vehicle, the system comprising:

an alarm controller fixably located within the passenger vehicle operable to enable wireless data communications; and

an alarm component fixably located within the passenger vehicle operable to enable wireless data communications with the alarm controller, the alarm component including a processor operable to perform an audible alarm indication function based upon signals received from the alarm controller and also when a signal has not been received from the alarm controller for a predetermined time interval.

The Examiner relies on the following prior art references to show unpatentability:

Hwang	US 5,739,749	Apr. 14, 1998
Camhi	US 5,825,283	Oct. 20, 1998
Curatolo	US 6,510,380 B1	Jan. 21, 2003
Khan	US 6,789,928 B2	Sep. 14, 2004 (filed Nov. 13, 2001)

Appellant's discussion of the admitted prior art in Paragraph 002 of the Specification ("APA").

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<sup>1</sup> See generally Spec. ¶¶ 004-09.

1. Claims 1, 3, 8, 10, 14, 16, 21, and 23 stand rejected under 35 U.S.C. § 103(a) as unpatentable over APA, Khan, and Curatolo (Ans. 4-7).
2. Claims 27-34 and 38 stand rejected under 35 U.S.C. § 103(a) as unpatentable over APA, Khan, Curatolo, and Camhi (Ans. 7-8).
3. Claims 35-37 stand rejected under 35 U.S.C. § 103(a) as unpatentable over APA, Khan, Curatolo, and Hwang (Ans. 8).

Rather than repeat the arguments of Appellant or the Examiner, we refer to the Briefs and the Answer<sup>2</sup> for their respective details. In this decision, we have considered only those arguments actually made by Appellant. Arguments which Appellant could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

#### THE REJECTION OVER APA, KHAN, AND CURATOLO

We first consider the Examiner's obviousness rejection of claims 1, 3, 8, 10, 14, 16, 21, and 23 over APA, Khan, and Curatolo. Regarding representative independent claim 8,<sup>3</sup> Appellant argues that there is no reasonable expectation of success in combining the cited references since the signal in Curatolo is sent to the GPS system to obtain geographical location

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<sup>2</sup> Throughout this opinion, we refer to (1) the Appeal Brief filed Nov. 21, 2006; (2) the Examiner's Answer mailed Dec. 11, 2007; and (3) the Reply Brief filed Feb. 8, 2008.

<sup>3</sup> Appellant argues independent claims 1, 8, 14, and 21 together as a group. *See* App. Br. 6-13. In contrast to the Appeal Brief, Appellant argues claim 8 separately from the other independent claims in the Reply Brief (Reply Br. 5-11), but nonetheless indicates that these arguments apply to the other independent claims (Reply Br. 11-12). Accordingly, we select claim 8 as representative of this claim grouping. *See* 37 C.F.R. § 41.37(c)(1)(vii).

data, and not to perform an audible alarm indication function (App. Br. 7-8). Appellant adds that Curatolo's signalling units are small and can be worn or attached to individuals. These types of signalling units, Appellant contends, cannot be rationally considered to encompass the form of an engine control module or vehicle horn as in Khan (App. Br. 8-9).

Appellant further argues that the cited references fail to provide a proper motivation to combine their teachings. Although Appellant acknowledges that Curatolo teaches that multiple signalling units can be placed in a motor vehicle, Appellant nonetheless contends that Curatolo does not teach or suggest combining the signalling units with a vehicular alarm system or its components since, among other things, Curatolo is limited to transmitting geographical location information (App. Br. 9-10). Appellant adds that since the distance between Curatolo's signalling units is a necessary and critical factor in sending a signal to the GPS, these signalling units cannot be *fixably* located within the same material asset, and yet retain this signalling functionality based on their mutual separation. As such, Appellant contends, Curatolo actually teaches away from fixably attaching the signalling units (App. Br. 11; Reply Br. 10-11). Furthermore, Appellant argues that Khan and Curatolo constitute non-analogous art (App. Br. 12).

The Examiner notes that Khan was cited merely to show that wireless communication between vehicles was known and that ordinarily skilled artisans could apply such a teaching to the APA system to provide a wireless system (Ans. 9, 11). The Examiner adds that Curatolo was cited merely to show that it is known to indicate an emergency situation responsive to an absence of periodic signals between two signalling devices (Ans. 10, 12).

The Examiner further notes that Curatolo's signalling devices can be placed in various components of a material asset, including a vehicle (Ans. 11, 13).

### ISSUE

The principal issue before us, then, is whether Appellant has shown that the Examiner erred in combining the teachings of APA, Khan, and Curatolo to arrive at the invention of representative claim 8. The issue turns on whether the references are reasonably combinable and whether there would have been a reasonable expectation of success for such a combination. For the following reasons, we find that Appellant has not shown such error.

### FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence:

#### APA

1. The Specification notes that conventional mobile alarm systems commonly employ (1) a central alarm controller, and (2) at least one component that can be physically separate from the central alarm controller (Spec. ¶ 002).
2. According to the Specification, automobile alarm systems typically locate the central alarm system in a passenger compartment, and the alarm indicator (e.g., a siren) in an engine compartment (*Id.*).
3. The Specification indicates that the central alarm controller typically communicates with components (e.g., the alarm indicator) via one

or more wires (*Id.*). The Specification also states that such wire runs are “difficult, tedious, or nearly impossible, to run.” (*Id.*).

*Khan*

4. Khan discloses a device for illuminating a vehicle wheel in conjunction with a vehicle’s turn signals, hazard lights, alarm systems, etc. (Khan, Abstract).

5. Khan’s device “provides additional warning lights that flash in conjunction with an alarm signal from an electronic anti-theft alarm device” (e.g., activating the vehicle’s horn, headlights, etc.). Integrating Khan’s device with these alarm functions provides enhanced conspicuity and warning in alarm situations (Khan, col. 6, ll. 33-39).

6. As shown in Figures 1 and 4, an array of lights 21 is mounted on each wheel, and an electronic control module 50 regulates and directs electrical power to the appropriate circuits within emitter body 20 to achieve the desired wheel light function. Electrical power is delivered to the lights via electrical wiring 60, carbon brushes 40, electrical tracks 31 on rotor 30, and lead wires 61, 62 (Khan, col. 7, ll. 25-44, col. 8, ll. 59-63; col. 8, ll. 28-36; Figs. 1, 4, and 5).

7. Khan’s electrical power distribution function is responsive to signals from sensors 80-83 such that the appropriate wheel light functions are concurrent with activation of the vehicle’s hazard lights, brake lights, and theft alarm (Khan, col. 8, ll. 31-51; Fig. 4).

8. Khan indicates that a wireless connection (e.g., using RF transmission technology) could be used in lieu of electrical wiring 60 to control the lights on the emitter body (Khan, col. 8, ll. 54-58; col. 5, ll. 9-23).

9. Khan notes that a non-physical connection/wireless transmission of electrical power can be used in lieu of carbon brushes 40 (Khan, col. 9, ll. 1-7).

*Curatolo*

10. Curatolo discloses a security and tracking system with two signalling units 10, 20 in communicating proximity with each other. When the two units are separated by more than a preselected distance, the location of the signalling units is automatically transmitted to a monitoring station 30 (Curatolo, Abstract, col. 2, ll. 21-33; col. 6, ll. 13-24; Fig. 1).

11. To this end, the first signalling unit sends a periodic radio signal to the second signalling unit. When the second signalling unit no longer receives this periodic signal, each signalling unit obtains its location from the GPS system and forwards this information to the monitoring station (Curatolo, col. 3, ll. 5-16; col. 9, ll. 28-43; col. 10, ll. 9-30).

*Camhi*

12. Camhi discloses an apparatus for monitoring subjects (e.g., automobiles, persons, etc.) based on their location. The apparatus includes a processor 12 and location determining means 14. Processor inputs may also be coupled to other systems, equipment, or sensors to (1) monitor operational variables or outputs of the coupled devices indicative of safety or security concerns, and (2) actuate the coupled devices (Camhi, Abstract; col. 12, ll. 40-50; Fig. 1).

13. One such actuated coupled device is an alarm (Camhi, col. 16, ll. 33-40).

14. The processor is coupled to a display means 24 via display line 26 which can be a wireless link (Camhi, col. 13, ll. 10-12, 28-38; Fig. 1). The



display means can include audible indicators such as horns and buzzers (Camhi, col. 13, ll. 28-33).

15. In one embodiment, the processor is connected to sensors 28 and output devices 34 via an I/O signal interface 30 and respective I/O lines 32 (Camhi, col. 15, ll. 50-64; Fig. 2).

16. Camhi lists a variety of diverse vehicular functions and systems that correspond to the systems, equipment, sensors 28, or output devices 34 that are coupled to the processor (Camhi, col. 16, l. 47 - col. 17, l. 27).

17. Should a monitored parameter fall outside its normal operational value or other predefined value, then an appropriate indication via display means 24 will be energized via display line 26 (Camhi, col. 17, ll. 29-35).

#### PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

Discussing the question of obviousness of claimed subject matter involving a combination of known elements, *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007), explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar

devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* [v. *AG Pro, Inc.*, 425 U.S. 273 (1976)] and *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969)] are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

*KSR*, 127 S. Ct. at 1740. If the claimed subject matter cannot be fairly characterized as involving the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness can be based on a showing that “there was an apparent reason to combine the known elements in the fashion claimed.” *Id.* at 1740-41. Such a showing requires some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.* at 1741 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

If the Examiner’s burden is met, the burden then shifts to the Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

## ANALYSIS

We find no error in the Examiner’s combining the respective teachings of the cited prior art to arrive at the claimed invention. As the Examiner indicates, APA effectively discloses every recited feature except for (1) the alarm controller’s wireless communication capability, and (2) the alarm component operable to perform an audible alarm indication function

based on when a signal has not been received for a predetermined time interval. We address these differences in turn.

First, we agree with the Examiner that providing a wireless communication capability for the recited alarm controller in lieu of communicating via wires would have been an obvious improvement in view of the cited prior art in light of the knowledge of ordinarily skilled artisans. As the Specification indicates, central alarm controllers in vehicles are typically located in the passenger compartment, and the alarm indicator (e.g., a siren) is located in the engine compartment (FF 2). And, as the Specification explains, communication between these devices is typically via one or more wires (FF 3). The Specification also states that such wire runs are “difficult, tedious, or nearly impossible, to run.” (FF 3).

In our view, merely replacing these wired connections with a wireless communication capability would have been tantamount to the predictable use of prior art elements according to their established functions—an obvious improvement. *See KSR*, 127 S. Ct. at 1740. Additionally, adapting the conventional wire-based connectivity in vehicular alarm systems with a wireless communication capability to gain the commonly understood benefits of such an adaptation (i.e., no need for point-to-point wiring, ease of installation, etc.) is commensurate with the adaptation of an old device using newer technology found to be unpatentable in *Leapfrog Enter., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (holding that “adaptation of an old idea or invention...using newer technology that is commonly available and understood in the art” (i.e., updating a children’s toy with modern electronic components to gain the commonly understood

benefits of such adaptation) would have been obvious to ordinarily skilled artisans).

In any event, we also find no error in the Examiner's reliance on Khan for teaching wireless communication between vehicular components and a controller. Khan discloses a device for illuminating a vehicle wheel that operates in conjunction with an existing vehicle alarm system to enhance the warning and conspicuity in alarm situations (FF 4-5). As shown in Figures 1 and 4, an array of lights 21 is mounted on each wheel and receive electrical power via electrical wiring 60, carbon brushes 40, electrical tracks 31 on rotor 30, and lead wires 61, 62 (FF 6).

In Khan, an electronic control module 50 regulates and directs electrical power to the appropriate circuits within the emitter body 20 to achieve the desired wheel light function (*Id.*). Specifically, this electrical power distribution function is responsive to signals from sensors 80-83 such that the appropriate wheel light functions are concurrent with activation of the vehicle's hazard lights, brake lights, and theft alarm (FF 7).

Notably, Khan indicates that a wireless connection (e.g., using RF transmission technology) could be used in lieu of electrical wiring 60 to control the lights on the emitter body (FF 8). Likewise, Khan notes that a non-physical connection/wireless transmission of electrical power can be used in lieu of carbon brushes 40 (FF 9).

Based on these teachings, we find no error in the Examiner's position that wireless communications could be used in lieu of the conventional wired connection in the conventional vehicular alarm system. Significantly, Khan not only teaches that the electrical wiring disposed between the control module and the brushes could be replaced with a wireless connection, but

also the carbon brushes themselves could be replaced with wireless functionality for electrical power transfer. Ordinarily skilled artisans, in our view, would therefore have ample reason to utilize wireless transmission in the admitted prior art alarm system in lieu of wires. We note that Khan is reasonably combinable with APA since Khan also pertains to vehicle alarm systems insofar as it provides an enhanced visual indication in conjunction with an audible alarm (i.e., the horn) (FF 5).

Appellants' arguments pertaining to Khan's wireless power transmission as being allegedly unsuitable for energizing an audible alarm (Reply Br. 6-7) are unavailing. Not only do we find these arguments speculative, they are not germane to the reason why the Examiner cited the reference. Khan was cited merely to show that it is known in the art to transmit signals wirelessly from a controller to an indicator in a vehicle in conjunction with an alarm system (Ans. 9, 11). Although this transmission is to visually indicate an alarm condition on the wheels when such a condition is detected, this alarm condition—like the APA system—involves an audible alarm (FF 5).

As such, we see no reason why Khan's fundamental teaching of using wireless transmission could not be applied to the APA audible alarm system, particularly in view of the well-known advantages of wireless systems over wired systems as noted above. In our view, Khan provides ample reason for skilled artisans to wirelessly transmit signals between the vehicular alarm controller and the associated component (i.e., an audible indicator) in the APA system instead of using wires for such transmission.

While the Examiner's reliance on Curatolo is a closer question, we nonetheless find a sufficiently rational basis for combining its teachings with

APA and Khan. Curatolo discloses a security and tracking system with two signalling units 10, 20 in communicating proximity with each other. When the two units are separated by more than a preselected distance, the location of the signalling units is automatically transmitted to a monitoring station 30 (FF 10). To this end, the first signalling unit sends a periodic radio signal to the second signalling unit. When the second signalling unit no longer receives this periodic signal, each signalling unit obtains its location from the GPS system and forwards this information to the monitoring station (FF 11).

Based on this functionality, we find no error in the Examiner's position that Curatolo reasonably teaches indicating an alarm condition when a signal has not been received for a predetermined interval. Although Curatolo teaches that this alarm condition is based on a particular degree of separation between the two signalling units, this separation is nonetheless determined by the second signalling unit's inability to receive a *periodic* signal (i.e., for at least a time interval dictated by the periodicity of the signal). As the distance between the signalling units gets larger, the attenuation of the transmitted periodic signal likewise would increase. At some point, this attenuation would result in the second signalling unit's inability to receive the signal, at least for a period. That Curatolo pertains to a tracking system involving the transfer of location information does not detract from the fact that the reference nonetheless teaches detecting an emergency (alarm) condition based on the inability to receive a transmitted periodic signal. That fundamental teaching is at least reasonably pertinent to wireless alarm systems generally, including those in vehicles.

We recognize that representative claim 8 calls for the alarm controller and alarm component to be *fixably* located within the vehicle. We further recognize that Curatolo triggers the emergency condition based on the physical separation of the signalling devices. Notwithstanding these apparent contradictory physical characteristics, however, Curatolo does not teach away from the recited feature.

In our view, skilled artisans would recognize that triggering an alarm condition upon not receiving a signal for a predetermined time interval as suggested in Curatolo would be a beneficial improvement to the APA/Khan system—even if the alarm controller and components were fixedly mounted in a vehicle. Triggering an alarm indication in this condition could indicate, among other things, a malfunction or incorrect installation of the alarm controller with respect to the associated component (e.g., spaced too far apart from the component for effective wireless communication), or even its unauthorized removal. In these situations, the detected degree of separation of the devices could be a basis for triggering this alarm condition notwithstanding the devices' fixed location in the vehicle.

Thus, we find no error in the Examiner's combining the teachings of Curatolo with the vehicular alarm system of other prior art references to arrive at the claimed invention. That Curatolo teaches placing the signalling units in various components of a vehicle or in the vehicle itself (Curatolo, col. 5, ll. 40-46), and involves the transmission of audio signals (Curatolo, col. 5, ll. 49-53) only bolsters our conclusion.

For the foregoing reasons, Appellant has not persuaded us of error in the Examiner's rejection of representative claim 8. Therefore, we will sustain the Examiner's rejection of that claim, and claims 1, 14, and 21

which fall with claim 8. For the same reasons, we will also sustain the Examiner's rejection of claims 3, 10, 16, and 23 which were not separately argued with particularity (App. Br. 13).

THE REJECTION OVER APA, KHAN, CURATOLO, AND CAMHI

We now consider the Examiner's obviousness rejection of claims 27-34 and 38 over APA, Khan, Curatolo, and Camhi. At the outset, we note that Appellant argued claims 27-34 and 38 together as a group in the Appeal Brief (App. Br. 13-15). Notably, Appellant's arguments in the Appeal Brief were limited to the following principal arguments: (1) there is no motivation or suggestion to combine the teachings of Camhi with the other cited prior art since Camhi discloses a tracking or monitoring device, not an alarm system or component as claimed, and (2) Camhi teaches away from combining with Khan to provide an audible alarm indication function (*Id.*).

But in the Reply Brief, Appellant makes several new arguments that were not raised in the Appeal Brief, namely that (1) the detector in Camhi is not connected to the means for performing an alarm indication function, and (2) Camhi's apparatus does not correspond to the means for performing an audible alarm indication function as the term is interpreted under § 112, sixth paragraph (Reply Br. 13). Also, for the first time in the Reply Brief, Appellant separately argues the patentability of dependent claims 30, 33, and 38 (Reply Br. 14-18). These arguments were also not presented in the Appeal Brief.

By not timely presenting these arguments in the Appeal Brief, they are deemed waived. See *Optivus Tech., Inc. v. Ion Beam Appl'ns S.A.*, 469 F.3d 978, 989 (Fed. Cir. 2006) ("[A]n issue not raised by an appellant in its



opening brief ... is waived.”) (citations and quotation marks omitted).<sup>4</sup> While we recognize that the U.S. Supreme Court rendered the *KSR* opinion after the Appeal Brief was filed, and the Reply Brief was intended to “supplement” the Appeal Brief in view of this decision (Reply Br. 2), the new arguments presented in the Reply Brief go well beyond merely supplementing the Appeal Brief in light of the holding in *KSR*. In short, we see no reason why these new arguments could not have been presented in the Appeal Brief.

Accordingly, we address only those arguments presented in the Appeal Brief pertaining to claims 27-34 and 38, and those arguments in the Reply Brief to the extent they are commensurate with the arguments in the Appeal Brief. Since Appellant argued these claims together as a group in the Appeal Brief (App. Br. 13-15), we therefore select claim 27 as representative of this grouping.

The issue before us, then, is whether Appellant has shown that the Examiner erred in combining Camhi with the other cited prior art to arrive at the invention of claim 27. The issue turns on whether there is a reason to combine Camhi with the other cited prior art, and (2) whether Camhi teaches away from such a combination. For the following reasons, we find that Appellant has not shown such error.

First, while Camhi pertains to a location monitoring system, it also operates in conjunction with—and indeed actuates—a vehicle alarm system

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<sup>4</sup> See also *Ex Parte Scholl*, No. 2007-3653 (BPAI Mar. 13, 2008) (Informative), at 18-19, *available at* <http://www.uspto.gov/web/offices/dcom/bpai/its/fd073653.pdf> (last visited Sept. 28, 2008) (same).

(FF 12-13). Further, given the comprehensive list of diverse vehicular functions and parameters associated with the sensors 28 (FF 16), the reference at least suggests that these sensors could detect one or more alarm triggering devices based on these sensed vehicular parameters and conditions. Although the connection between the sensors and the output devices 34 is via I/O lines and the processor, the scope and breadth of the claim language does not preclude such an indirect connection.

Additionally, when a monitored parameter is deemed abnormal, Camhi's system indicates this condition via display means 24 (FF 17). This display means can have audible indication functions that include horns and buzzers (FF 14). Notably, the connection (i.e., the display line 26) between the display means and the I/O signal interface of the processor can be a wireless connection (*Id.*).

Based on these collective teachings, we find no error in the Examiner's reliance on Camhi considered in conjunction with the other cited prior art to arrive at the invention of claim 27. In our view, the Examiner's combination of references is based on articulated reasoning with at least some rational underpinning to support the legal conclusion of obviousness. While Camhi does discuss the drawbacks of automobile alarms generally (Camhi, col. 1, l. 44 - col. 2, l. 16) as Appellant indicates (App. Br. 13-14), we nonetheless find that the reference as a whole does not discredit or discourage alarm functionality tantamount to teaching away from such approaches.<sup>5</sup> Rather, as noted above, Camhi provides a location-based

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<sup>5</sup> "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path

tracking functionality that can operate *in conjunction with* vehicle alarms. As such, we see no error in combining the teachings of Camhi with the alarm functionality of the other cited prior art.

For the foregoing reasons, Appellant has not persuaded us of error in the Examiner's rejection of representative claim 27. Therefore, we will sustain the Examiner's rejection of that claim, and claims 28-34 and 38 which fall with claim 27.

THE REJECTION OVER APA, KHAN, CURATOLO, AND HWANG

Likewise, we will sustain the Examiner's rejection of claims 35-37 under 35 U.S.C. § 103(a) as being unpatentable over the teachings of APA, Khan, Curatolo, and Hwang. As with the previous rejection, Appellant presented arguments pertaining to this rejection in the Reply Brief that were not timely raised in the Appeal Brief. Specifically, Appellant in the Appeal Brief did not separately argue the Examiner's rejection of claims 35-37, but merely referred to the previous arguments pertaining to the independent claims (App. Br. 15). In the Reply Brief, however, Appellant presented separate arguments for claims 35 and 36, respectively (Reply Br. 16-17). As noted above, we see no reason why these arguments could not have been raised in the Appeal Brief and are therefore deemed to be waived. *See Optimus*, 469 F.3d at 989.

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set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Kahn*, 441 F.3d 977, 990 (Fed. Cir. 2006) (citations and internal quotation marks omitted).

Turning to the rejection, we find that the Examiner has established at least a prima facie case of obviousness for claims 35-37 that has not been persuasively rebutted. Once the Examiner has satisfied the burden of presenting a prima facie case of obviousness, the burden then shifts to Appellant to present evidence and/or arguments that persuasively rebut the Examiner's prima facie case. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). In the Appeal Brief, apart from merely referring to previous arguments, Appellant did not particularly point out errors in the Examiner's reasoning to persuasively rebut the Examiner's prima facie case of obviousness for claims 35-37 based on the collective teachings of the cited prior art. Therefore, for the above reasons, we will sustain the Examiner's rejection of those claims.

#### CONCLUSION OF LAW

Appellant has not shown that the Examiner erred in rejecting claims 1, 3, 8, 10, 14, 16, 21, 23, and 27-38 over the collective teachings of the cited prior art references under § 103.

#### DECISION

The Examiner's decision rejecting claims 1, 3, 8, 10, 14, 16, 21, 23, and 27-38 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

Appeal 2008-4193  
Application 10/789,534

AFFIRMED

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